Response to FCC Public Notice on closed-captioning rules

This response pertains to the FCC's 2010 Public Notice (CG 05-231; ET 99-254) on closed-captioning rules. My focus is on captioning *standards*.

Permanent location

This submission is permanently located at joeclark.org/fcc2010/.

Introduction

It isn't fair to say the free market, left to its own devices, would provide no captioning whatsoever. History proves otherwise. But it also proves that the free market will provide so little captioning it amounts to illegal discrimination against deaf people. We imposed captioning quotas, by law and regulation, to redress such discrimination.

But history and our experience up to this very second prove the free market will provide **captioning that sucks**. We can talk about the problem or we can solve the problem. I'm proposing a solution.

Background

I am a journalist and author whose interest in accessibility for people with disabilities dates back nearly 30 years. I wrote the book *Building Accessible Websites* (New Riders, 2001). The *Atlantic Monthly* dubbed me "the king of closed captions," albeit so long ago it is old news. I worked within accessibility-related standards bodies like the W3C and PDF/UA until it became obvious that was a fool's errand. I have given various public presentations on captioning issues, including captioning typography.

Unlike other respondents, I have 30 years' near-continuous experience *watching* captioning – in four countries, no less. This will become an important point later.

Quantity without quality had unintended consequences

The FCC's minimum *quantities* of captioning make for nice soundbites and more or less ensure that captioning isn't completely absent from most of the shows people watch. But requiring a certain amount of captioning without regard to *how it's done* reeks of a regulation that doesn't understand the thing

it is regulating.

It seems that most people with the power to make decisions either do not care to learn much about captioning or resent captioning outright. To them, captioning is a deceptively straightforward task: Write down what people say. If they glance at a monitor and see words that vaguely correlate to the audio, they consider the job done. We can view this attitude an example of the Anything's Better Than Nothing fallacy of captioning.

Anything *is* better than nothing, but we're talking about two important issues here: The legal rights of viewers with disabilities and the artistic integrity of the original program. The latter point is not to be taken lightly; even the worst TV show, the show whose very existence bothers you, the show you wouldn't watch if your life depended on it, the show that's well beneath your dignity, has artistic merit. There may be lousy TV shows, but there should never be such a thing as lousy TV captioning. If you can't agree with that notion, I don't know why you're part of this discussion.

Because FCC regulations explicitly permitted broadcasters and VDUs to stuff anything at all into the vertical blanking interval and call it "captioning," broadcasters, producers, and distributors have gone right ahead and done exactly that. The Anything's Better Than Nothing fallacy is taken to the absurd extreme of insisting viewers must accept whatever el-cheapo "captioning" that somebody higher up the food chain is willing to pay for.

There really is no analogy with other industries. This is *not* like requiring seatbelts but not brakes in automobiles. It isn't like requiring wheelchair ramps but allowing ramps at a 45° angle. Captioning is sui generis because it involves fleeting displays of the written word that must be instantly understood even while picture and sound are simultaneously presented. Captioning *is not straightforward* and is easy to get wrong.

Captioning always has a new low it can hit

No matter how bad you think captioning is, somebody can always make it worse.

Captioning lifers will recall the early open captioning on PBS programs like *The Captioned ABC News*. The first time we saw the future – Line 21 closed captioning – we lost our marbles. Overnight we went from self-evidently correct captioning – full-screen positioning, mixed case, proportional

spacing, colour when needed – to horrific dot-matrix capitals in white on a black background, quasi-centred at best but mostly in flush-left blocks. Could it get worse? Sure, as it turns out. Worse is all it's gotten.

Just since the FCC captioning regs took effect:

- NBC Universal – of the incumbent networks, by far the most contemptuous of captioning – auctioned its captioning contract to the *lowest* bidder. Which poor saps won that auction? The captioner that bills itself as having the largest offline-captioning staff in the U.S., CaptionMax. Let's learn more about them.

  CaptionMax evolved from an interchangeable commodity captioning vendor working in all caps to a commodity vendor using mixed case and back again. Then it devolved into a subpar vendor writing captions as bottom-centred "subtitles" of no more than two lines in length. (And, a source informs me, with a lot of transcription done in India – a place where, as any caller to a tech-support line knows, they don't speak American English.)

  All-all-caps, all-bottom-centred captioning is barely comprehensible on a good day and, frankly, ought to be banned.

  Now, who knows why the company that bills itself as "Faster. Better. Nicer™" took these steps? Theories:

    - CaptionMax "won" the NBC reverse auction. Price lowballing forced founder Max Duckler to cut corners somewhere, so caption positioning was thrown out the window. (What we have now is a parody of caption positioning. All-bottom-centre "captions" are scrollup captions photographed as still pictures.)
    - NBC is a partner in Hulu, and Hulu assigned a lot of its Chinese developers the task of figuring out captioning. As foreigners, all they understand is subtitling; CaptionMax "captioning" works immediately in an online system that can't differentiate subtitles from captioning. (In other words, if all the kool kidz watch TV on Hulu and all they're going to get is bottom-centred captions there anyway, why not set them up like that

beforehand?)

Nonetheless, CaptionMax's unwatchable captions, now seen everywhere from *The Office* to *Sesame Street* (!), are emblematic of the decline of captioning: It always get worse.

- Broadcasters and producers who don't understand or simply hate captioning think real-time captioning works for nonfiction prerecorded programs. It doesn't, not least of all because the program *is not live* and such captioning is guaranteed to contain errors. (Then those errors are never fixed, at all, ever; the tape with the real-time captioning is endlessly replayed far into the future.)

  Or they think that real-time or, much more commonly, scrollup captioning works for fictional narrative programming. Again, it does not. It is impossible to follow a drama or comedy, to take two examples, using scrollup. It can't be done. You might as well just print us out a transcript and snailmail it. Scrollup captioning is a disembodied entity wiggling somewhere distant from the fictional program; pop-on captioning is actually part of the show.

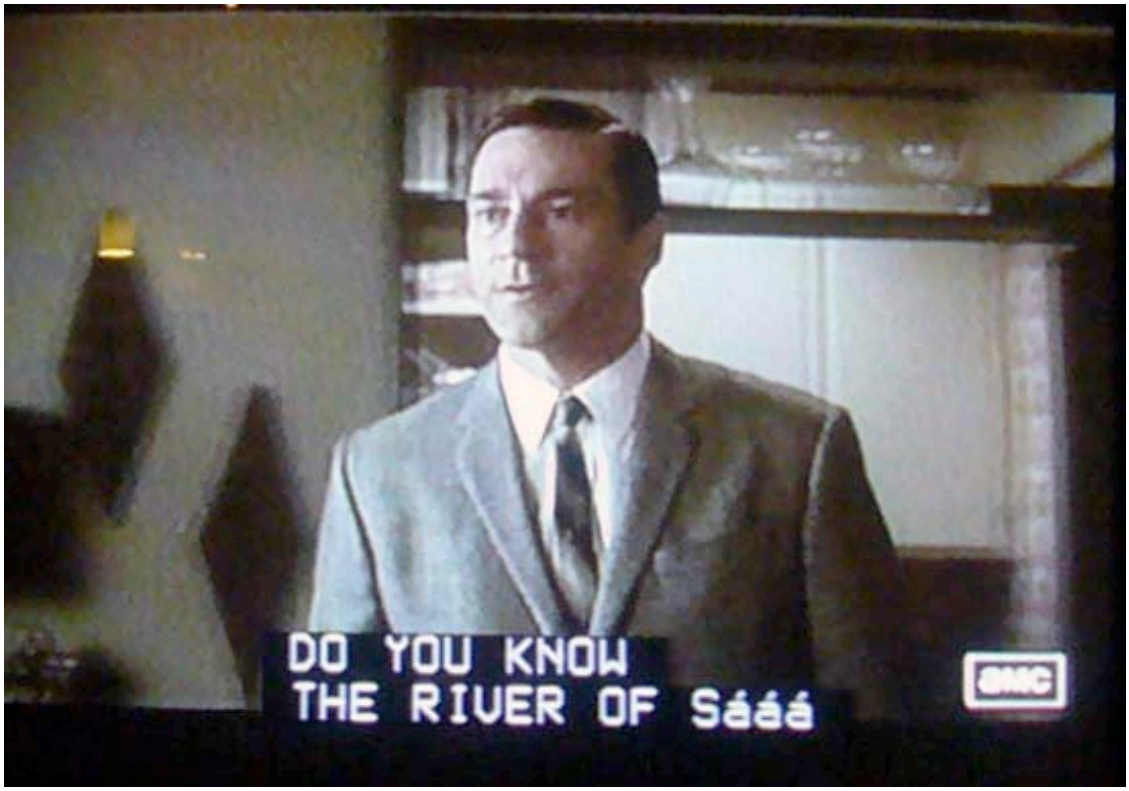
  Turner Classic Movies is especially prone to butchering "classic" movies with scrollup captioning. Essentially all Spanish-language captioning is scrollup, even fictional shows, as is every soap opera I know of, some of which used to be captioned in pop-on.

- Difficult material devolves from the rare high-quality shop to whoever's cheaper. JR Media Services did a creditable job captioning a quintessential writer's show, *Mad Men*, with its demanding period argot. Captioning was then devolved to uncredited hacks who literally cannot understand the show they're trying to caption. I assure you I am not the only person who noticed.

  I blame the broadcaster, AMC, for this, because the same thing happened with its other shows, like *Breaking Bad* and *The Walking Dead*.

- AMC is also guilty of a new low it can call its own: Forcing captioners to pre-censor dialogue. Even pejoratives as benign as *shit*, *goddamn*, and *balls* are replaced, wholly or partially, with asterisks. But AMC's hack-job captioner is so clueless about its own medium it does not understand that `*` requires special handling in captioning (it's in the extended character set at `[12,28]`).

1.



2.

Again, I'm not the only one who noticed.

Now, why did they do it? To cheap out, of course. Eventually there will be a syndication edit with cleaned-up audio, and somebody at AMC decided that even the puny 30% extra it would cost to recaption at that point was too much money to spend. Meanwhile, how much do those coveted advertising spots on *Mad Men* go for?

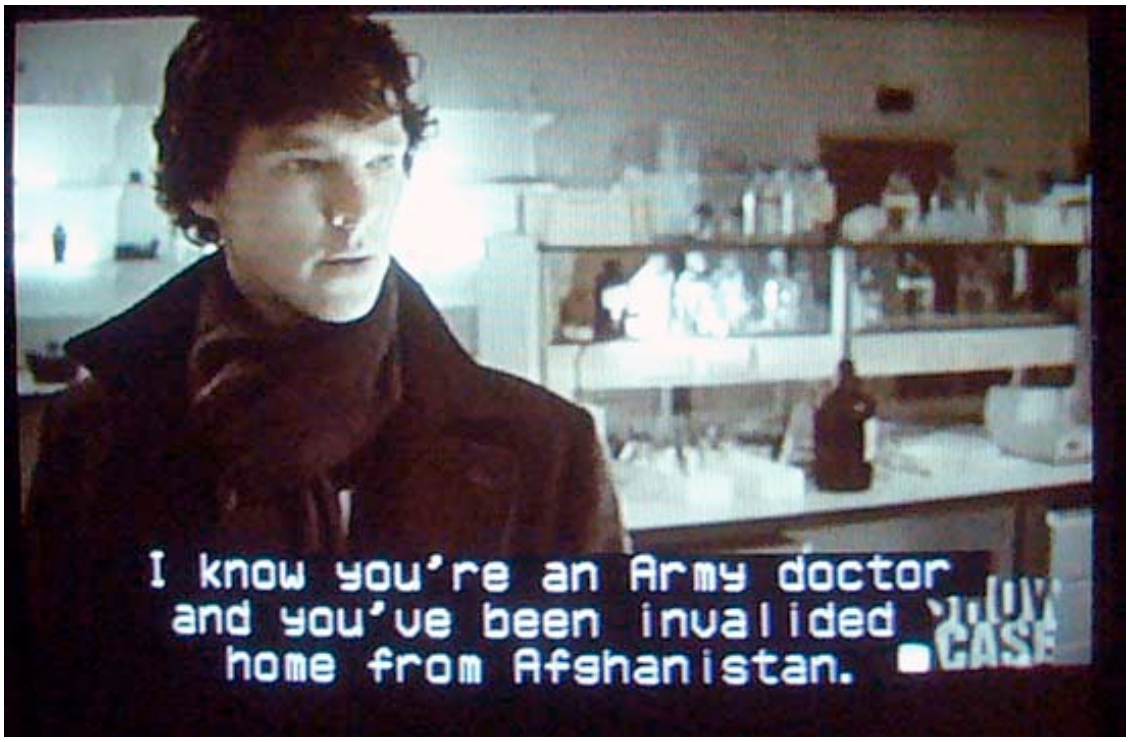
The lesson here is that NBC isn't the only broadcaster that schemes and plots all year to wring its captioning budget dry. It's just easier to shaft the deaf. Nobody got into this business to help cripples, did they?

- Captioners gutted their operations: WGBH closed what it was always proud to tell us was "the world's first captioning agency," located at its Western Ave. headquarters in Boston. (A few stragglers remained. But essentially all captioning, even local Massachusetts programming, was sent to the L.A. office.)

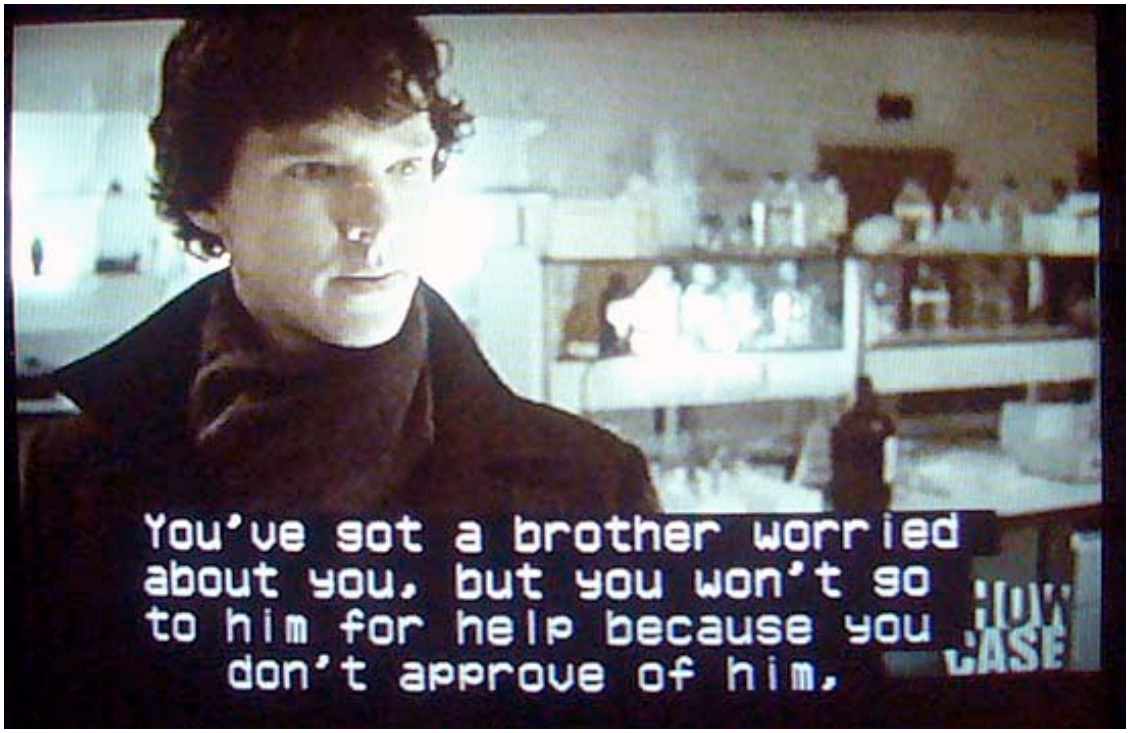
  A perennial misuser of government grant money, NCI, locked out its unionized staff and has never quite clarified whether or not it sends work overseas, or whether, when that happens, clients know about it.

- The United States is being invaded by foreigners: Bizarre, failed U.K. "subtitling" is being transcoded to Line 21 with essentially no changes. (The only alteration I can detect is seen in failed U.K. music "subtitling," where # changes to Line 21–standard ♪. At an underlying level, though, it's *the same character*.)

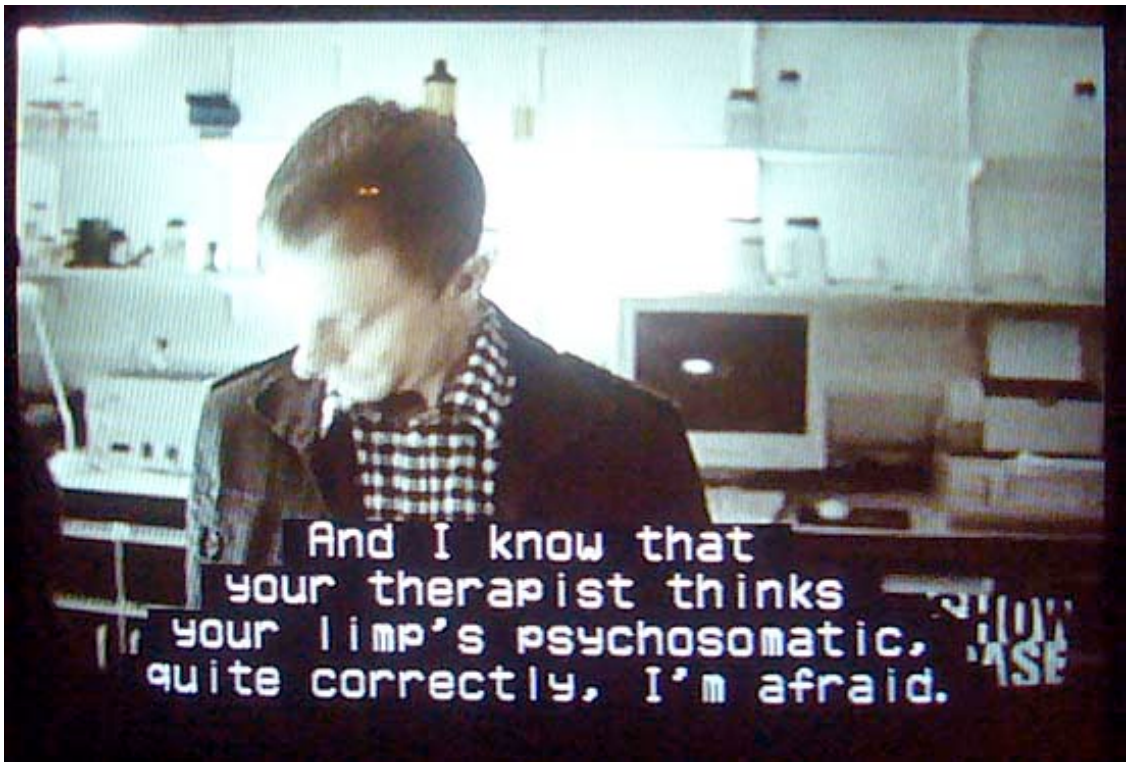
  Compare these identical scenes from *Sherlock* (2010) captioned by Brits and by Americans. Start with this centred mass of unreadable characters, which makes all dialogue seem to be coming from Dr. Watson. (Only Sherlock Holmes actually speaks.)

1. 

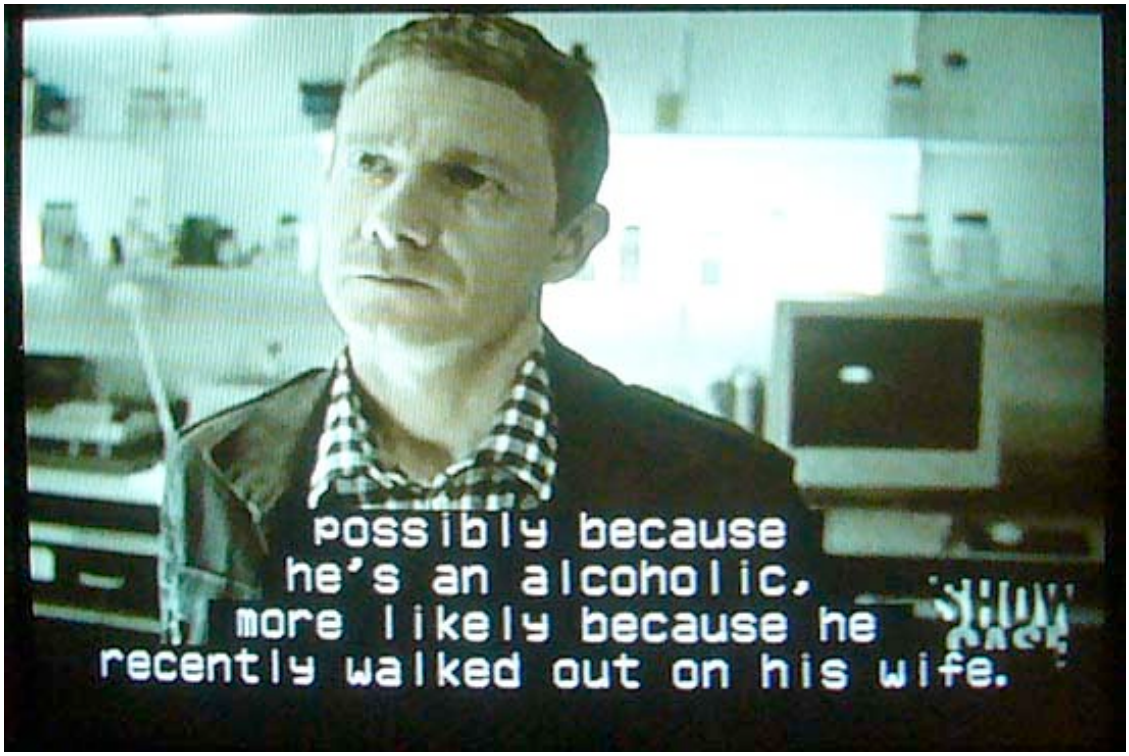
2.


You've got a brother worried
about you, but you won't go
to him for help because you
don't approve of him,

3.

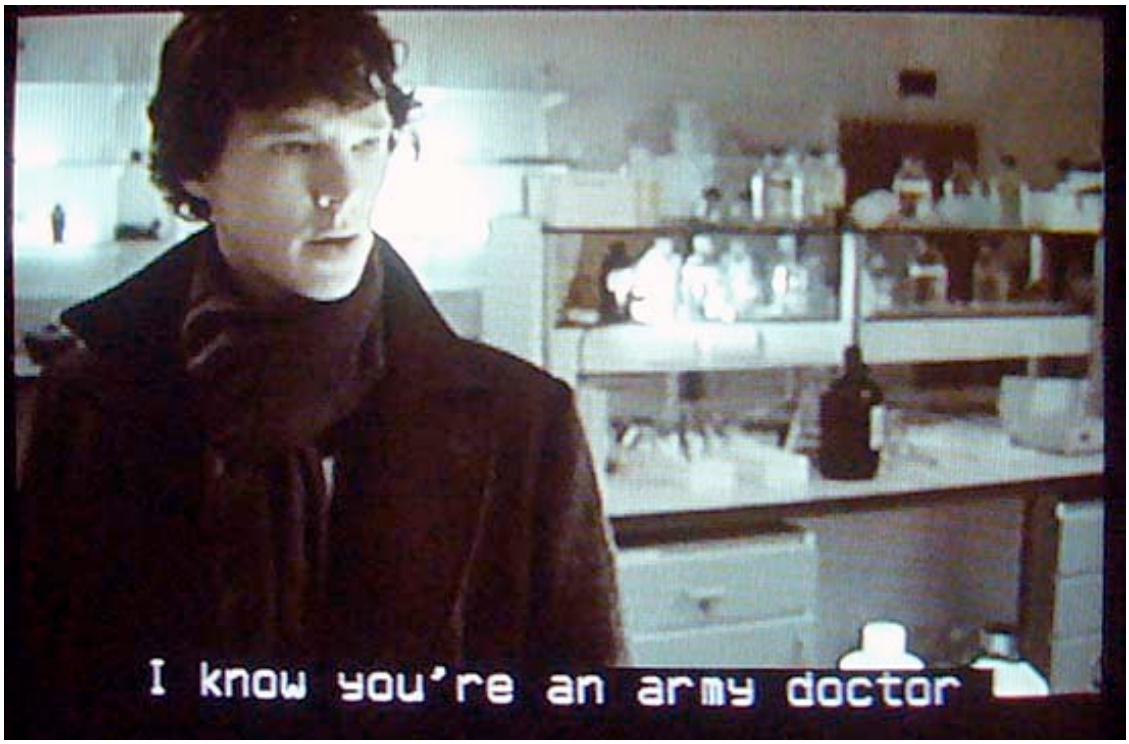

And I know that
your therapist thinks
your limp's psychosomatic,
quite correctly, I'm afraid.

4.

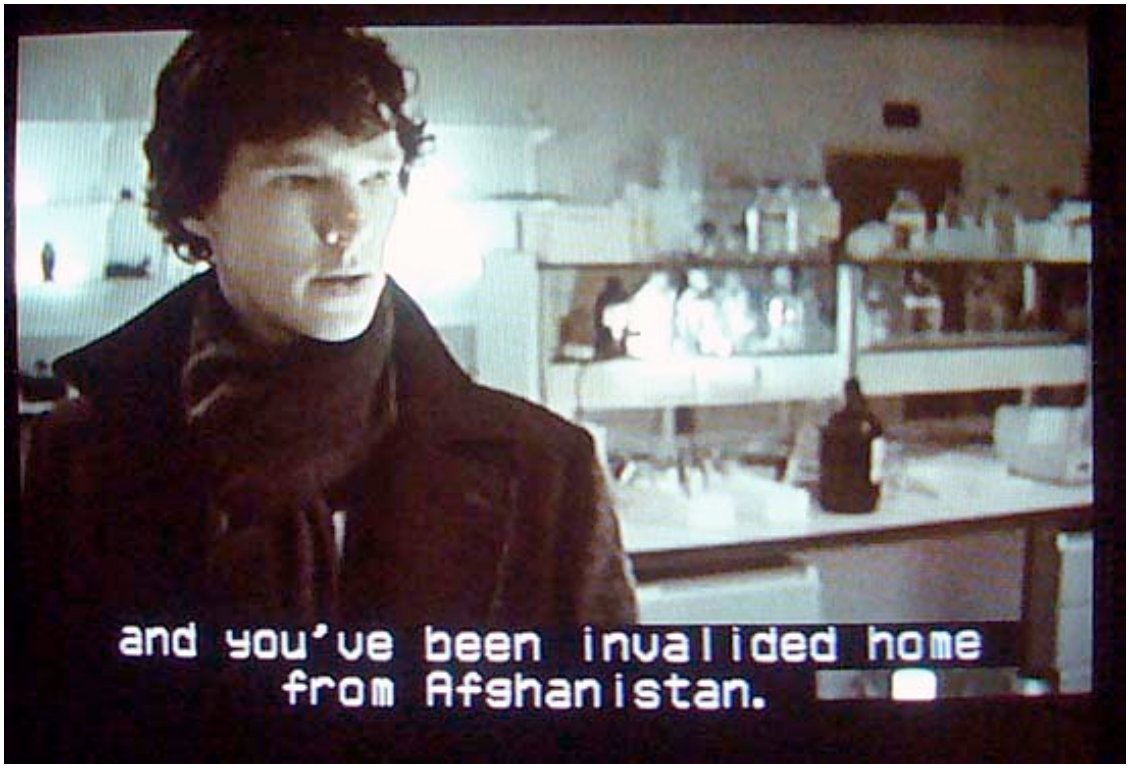


Compare that with the same scene in legitimate captioning, with verbatim transcription, readable caption chunking, and actual positioning.

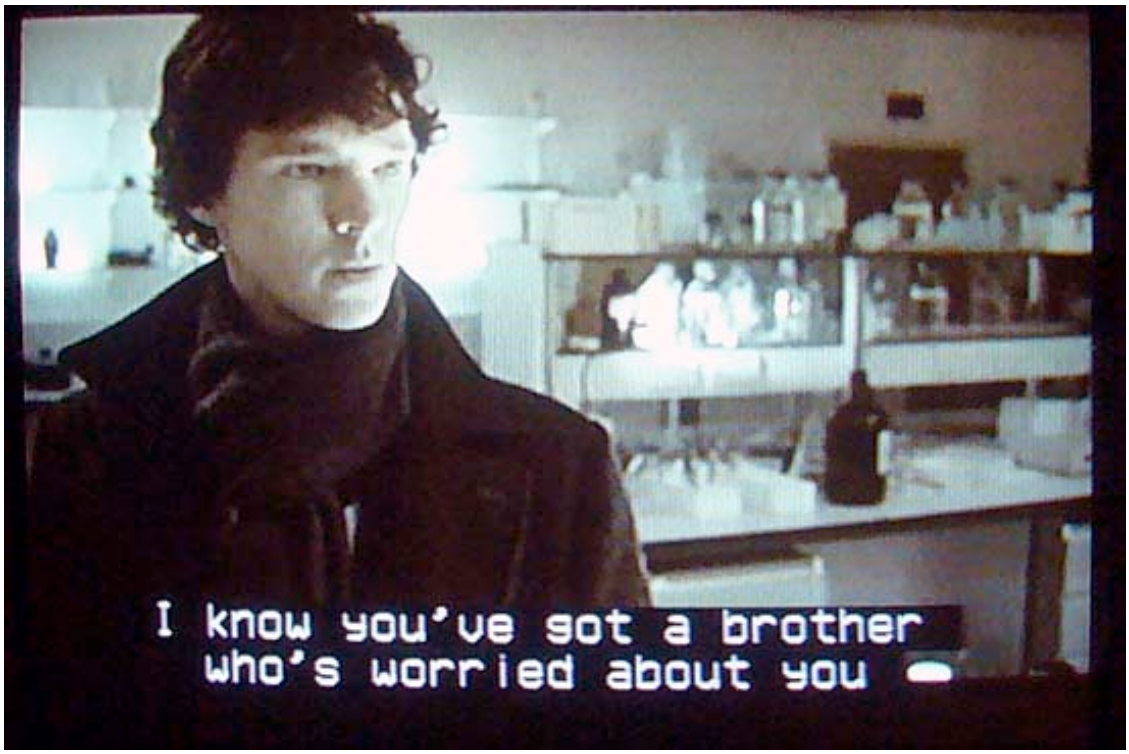
1.



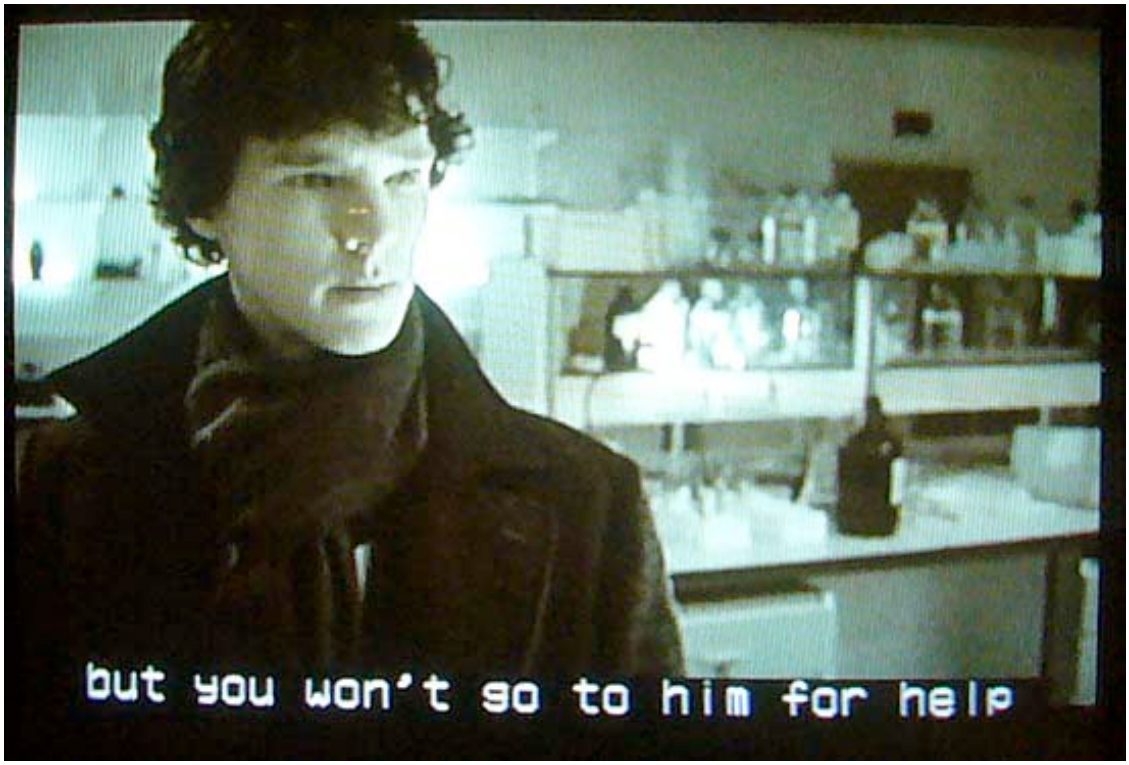
2.


and you've been invalided home
from Afghanistan.

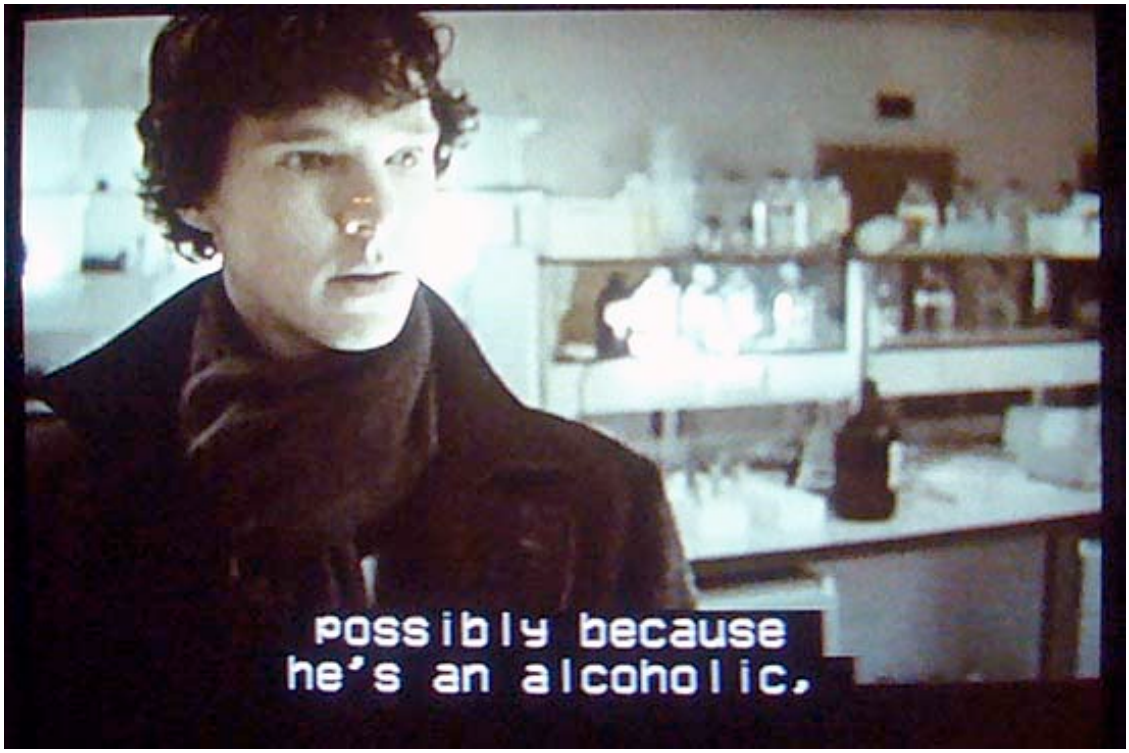
3.


I know you've got a brother
who's worried about you

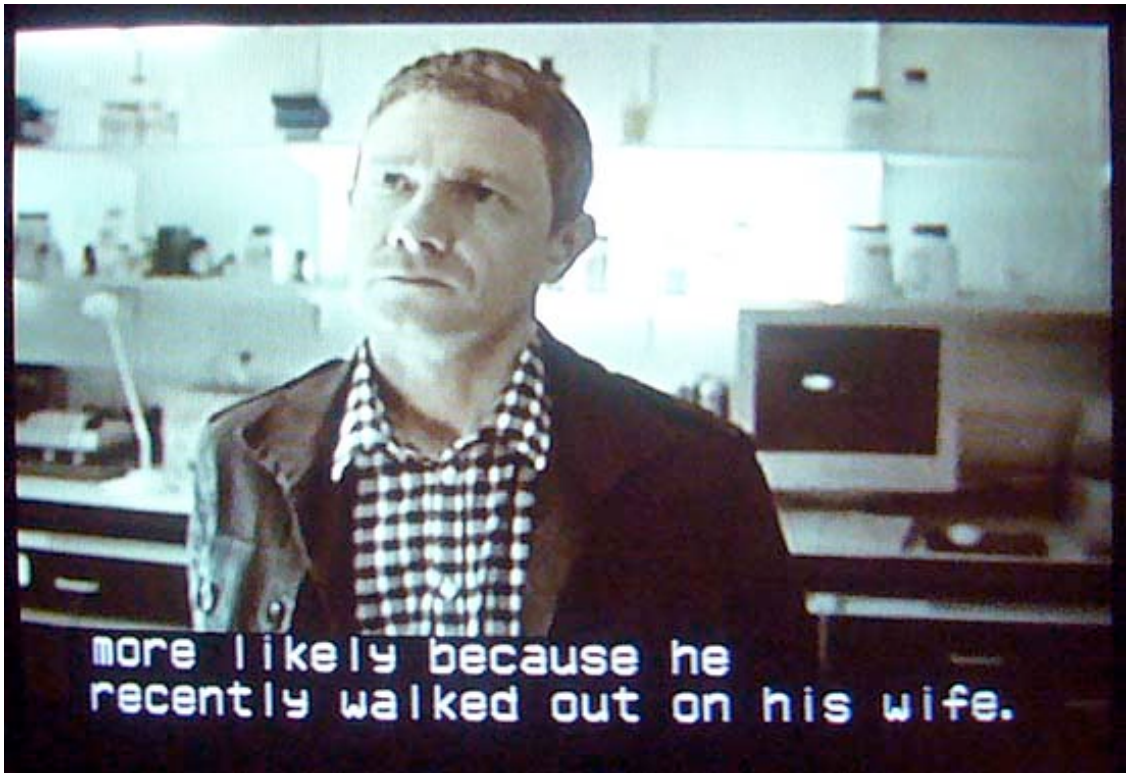
4.


but you won't go to him for help

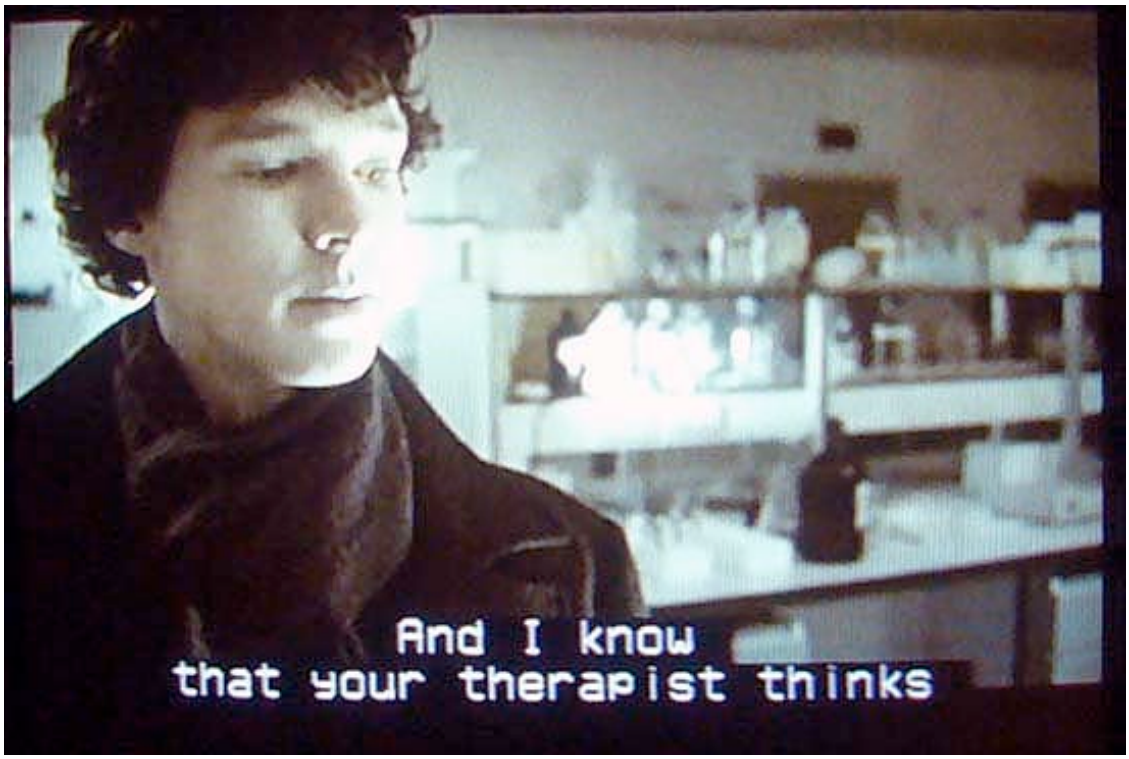
5.


possibly because
he's an alcoholic,

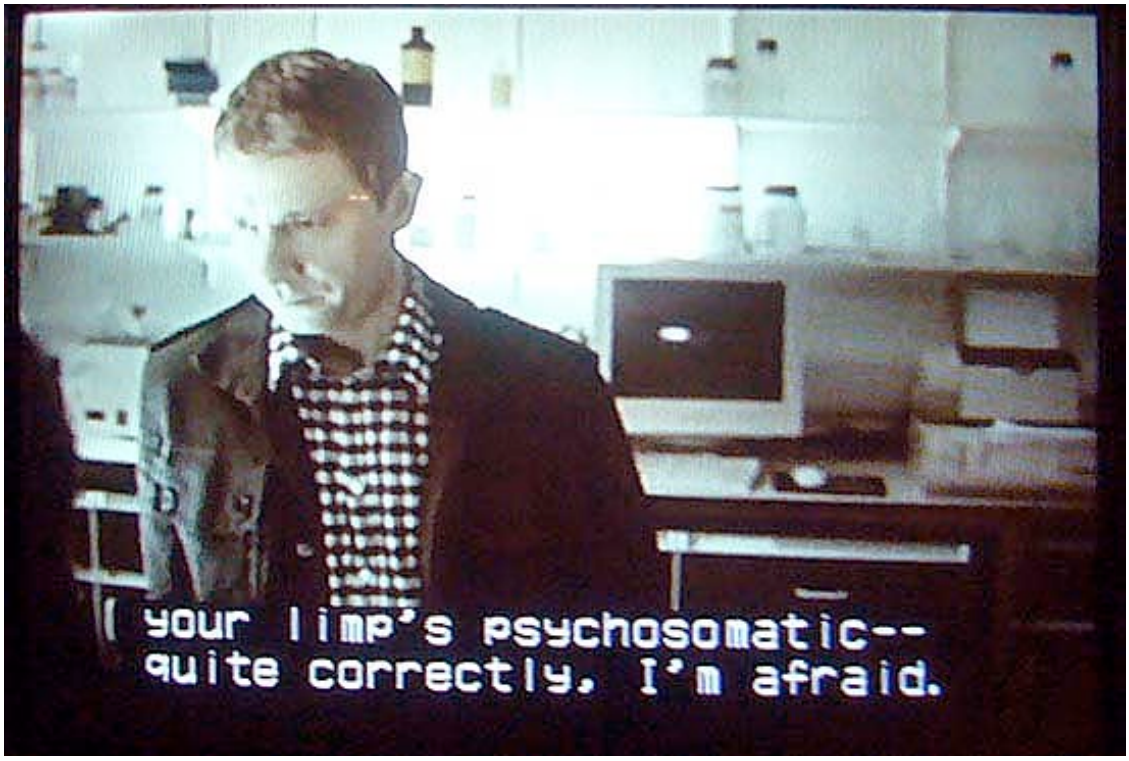
6.


more likely because he
recently walked out on his wife.

7.


And I know
that your therapist thinks

8.



So: That's what's happening in captioning today. Had anyone else noticed? Did *you* notice? Is this the first time you've heard of these facts? (Do you even watch captioning?)

What are viewers going to do – file a complaint?

A complaints-driven system is a proven failure, the FCC's improved procedures notwithstanding. It borders on impossible for a viewer to file a complaint about captioning. (Really, how *do* you do it when you're lying on the couch watching TV at night?)

It is time to distance ourselves from a reactive and adversarial complaint process that has proven not to work. And the only way to do that is to establish and impose *up front* a set of standards that are independently developed, tested, researched, and proven to improve quality.

The need for independent captioning standards

Legitimate standards are urgently needed now. Such standards have to be developed outside the incumbent captioning industry. They have to be tested to prove they work. Then a certification program must be developed for practitioners. Then standards have to be imposed across the board. Only at that point can we claim we have achieved accessibility.

Now, why do the standards have to be *independent*?

Captioners think they are special snowflakes

Every captioning house does things differently. This is a bug, not a feature. It is the problem in a nutshell. Yet in an enduring conceit of the industry, every captioner believes Our Captions Are Better Than Theirs. But every captioner's work cannot possibly be better than everyone else's. Different is all it usually is.

If asked, captioning lifers could venture their own priority lists of captioners to use for prerecorded shows.

- We never suggest using a postproduction house; the place that duplicates your tapes doesn't know how to caption. (Don't waste your time hunting for exceptions.)
- We caution against mom-'n'-pops, since they're too understaffed and work only on the most marginal shows, including porn.
- Banal mainstream caption factories like Vitac give you banal mainstream work. (Now we have a new subcategory of banal mainstream shops that undercut their own legacy, and it's a growing list – CaptionMax, NCI, WGBH.)
- At the top end are high-quality captioners that can barely eke out a living, like Captions, Inc. and JR Media Services.

The fact that such a list can actually be compiled should be a warning sign. Within a single presentation method (e.g., pop-on captioning), there shouldn't *be* such a thing as different kinds of captioning. There should just be *captioning*. It should be impossible to identify the caption house just from what is dismissively called captioning "style." Discrepancies in captioning style are something to be *eliminated*.

Captioning is not a venue for innovation or one an invitation to demonstrate your individuality and creativity. It is not a place for one captioner to manifest differences, most of them marginal, from other captioners' work. By now, *there is no new way to caption*. All we have are *different* ways to caption, which differences are a restatement of the problem.

Eliminate the issue of style and then the discussion turns to quality of execution, and for that to happen we'll need independently developed, tested, and proven standards imposed by law or regulation.

Captioners hire the wrong people

Broadcasters constantly lowball captioning companies on price. Hence captioners have had to hire people willing to work cheap. That means subcontracting to foreign countries that

don't speak U.S. English or hiring an undifferentiable mass of inexperienced young adults.

Any captioning lifer will confirm – as from the experience of the now-destroyed Caption Center at WGBH Boston, or from that of Captions, Inc. – that an older but varied workforce can do a good job of captioning.

- A typical such workforce has in its midst a lot of gay males; Jews; experienced writers, editors, and proofreaders; and other unrepentant sticklers.
- These groups lead lives in which they have read, written, spoken *and listened* widely. The vastness of their linguistic diet leaves them unfazed by terminology. They have extensive general knowledge and are rarely flummoxed by the topics of the programs they caption.
- They know where to look to find the answers to terminological questions. Plus they can just ask each other for help; this is a group in which somebody probably *will* know the answer to a question.
- Quite in defiance of the lessons of *The Mythical Man-Month*, here adding more captioners actually makes captioning better and faster.

But those aren't the captioners getting hired these days.

- The typical offline captioner nowadays is a female in her early 20s who recently graduated with a liberal-arts degree with barely any value in the job market – chiefly English literature, which offers no tools or training to caption real-world TV shows. (Your master's thesis on Chaucer does nothing to equip you to caption *Two and a Half Men*.)
- The monoculture of young college graduates ensures that everyone has more or less the same lacunæ in their knowledge, so that if one captioner ever manages to actually double-check the work of another, both can be relied upon to get the same things wrong. They see right through each other's mistakes.

These captioners are too young and green to have developed adequate knowledge and vocabulary to do captioning well. Yet these are the people captioning your shows – because middle-aged sticklers cannot and will not work for peanuts.

Captioners are the *last* people who should run a standards body

The experience from Canada and the U.K. irrefutably shows

that the captioning industry, left to its own devices, will write down what it already does and call it a "standard." Such a standard rarely bans any specific practice and leaves so much wiggle room that centred all-caps captions can be deemed to comply as handily as positioned mixed-case captions.

Captioners are provably not interested in standardizing their methods if it means changing those methods. Captioners want standardization as long as the standard corresponds exactly to what they're already doing. Captioners will never vote their own stylistic discrepancies out of existence. Standards, therefore, have to be legally imposed from the outside to overcome captioners' self-interest.

Industry organizations, like the CEA, are even less willing to recommend significant change, no matter how necessary. The standard for HDTV captioning (CEA-708) is a cautionary tale of poor design; vague, sometimes incomprehensible, often misspelled writing; and a complete botching of fields outside the expertise of a committee dominated by engineers (e.g., typography, the actual instrument of captioning).

Any government committee will be overrun by legacy captioning companies

The FCC or any other U.S. government department is not in a rational position to form a committee to develop a captioning standard. A few deaf and hard-of-hearing organizations would be invited along for the ride, but the committee would be dominated by incumbent captioners. WGBH Educational Foundation, recipient of endless grant money for accessibility "research" and a perennial member of every committee under the sun, would take its place on such a committee as if by birthright and would pretty much run the thing.

A further point on grant money: It taints the process. A standardization committee formed by a U.S. government agency whose members are recipients of U.S. government funds constitutes a clear conflict of interest. Those parties are all beholden to the same paymaster.

The solution: The Open & Closed Project

The solution to the problem of poor-quality U.S. captioning is to let an independent research group in a neighbouring country write the standard. I refer to my proposed nonprofit research and standardization body, the Open & Closed Project, which will develop global standards for captioning (among other things) *based on research and evidence*. Where there *isn't* any

research or evidence on a certain topic, we'll actually do it. And unlike other standards bodies, which have hefty membership fees or are dominated by incumbents, *everyone* may contribute to the development of the Open & Closed Project's recommended practices.

To prove the standards actually work, we'll spend a year beta-testing them in the real world. The resulting published standards will, moreover, be licensable for free, though books and physical media carry a cost. Afterward, training programs will be established; it will then finally be possible to pursue offline captioning as a legitimate field of study. Graduates can be certified as proficient in Open & Closed Project practices. Producers, broadcasters, and, yes, regulators can all require their contractors to be Open & Closed–certified.

At the end of the process, we won't have to contend with *n* varieties of captioning from *n* different providers. Advocates have argued for decades that accessibility should be an integral part of the production process instead of tacking it on at the very end. With standardized practices, we'll come as close as we ever have to reaching that goal.

The Open & Closed Project is an unfunded project. It might cost $5 million at the outside. It has a great deal of grassroots support (even CaptionMax supported it!), but because it is the only proposal that will actually solve the problem, it is held in something akin to contempt by Canadian broadcasters and the Canadian broadcast regulator, the CRTC. We must be on to something if they hate us that much. This would be a bad time for Americans to replicate that contempt. I'm handing you the solution on a dull brass platter here.

An attached brochure (PDF) explains more about the Project.

Standard techniques in television captioning

After the manner of my list of standard techniques in audio description, none of which have been substantively questioned in the nine years since publication, let me propose basic, noncontroversial principles for television captioning. I defy *anyone, anywhere* to provide a viable argument against any of the following.

1. Do not use all upper case. Use upper and lower case or, stated differently, mixed case or sentence case.
    - Hence do not use all upper case for most captions but mixed case for special captions like whispering or voices communicated through radios.
2. Caption verbatim or as close to verbatim as technically possible. Do not intentionally edit or reduce for a claimed "reading speed."
    - For children's or language-learning programs where a different reading speed is needed, caption twice (e.g., CC1 for verbatim, CC2 or CC3 for edited).
3. Move captions to indicate the onscreen position of the speaker or source. Do not use invariant positioning for pop-on captioning, including invariant centred positioning.
4. Do not use scrollup captioning or real-time captioning for prerecorded programming.
    - If your in-house captioners or a practicable outside house can caption this rare showing at higher cost (as by having four people work on it simultaneously), pay the higher cost. If a program arrives so late there indisputably is no way to produce pop-on captioning, use real-time or scrollup captioning only for the *first* airing.
    - If using real-time captioning and subsequent airings of the program take place soon after (including different dayparts only an hour or a few hours apart), errors must be corrected for subsequent airings. Have the program captioned in pop-on without delay. Repeat broadcasts seen a day, days, weeks, months, or years later cannot retain scrollup or real-time

captioning as a pretended equivalent to pop-on captioning.

5. Use separate blocks for different speakers. Do not combine different speakers on the same line.
6. Do not censor.
    - Do not alter a transcript, or refuse to transcribe, because you object; or you know that someone else objects; or you imagine or predict someone might object to the original.
    - If a later edit (e.g., for syndication) removes pejoratives from audio, edit captions only then. Do not pre-censor captioning in anticipation of a cleaned-up audio edit.
7. Caption all song lyrics.
    - In rare cases, some background singing may be impracticable to caption if important dialogue or sound effects happen simultaneously. The default is to caption all singing.
    - In particular, do not refrain from captioning a song because you or someone else believes, in the absence of a court ruling, that such would be a violation of copyright.
8. Do not guess.
    - It is rare that speakers *fail to make sense*. That one word you can't understand its speaker surely did.
    - Do not insert a soundalike word in the hopes no one will notice. Do not include placeholder characters – like `..` or `[..]` or `[...]` – in the hopes you'll do another pass on the program and replace those with the actual word.
    - *Ask other people* what the word is, including the producers, the original speaker, other captioners in the room, or independent experts on the program's subject.
9. Caption subtitled programming. Subtitling is not a substitute for captioning.
    - A program in a foreign language with subtitles in the language of the captioning audience needs *additional captioning* for *unsubtitled*

utterances and non-speech information.

- Do not duplicate already-subtitled dialogue in captioning.

10. Use all technical features of the captioning specification. In particular, use accented characters when needed and do not limit left-margin positioning to tab stops. Flush-right captioning is permitted where warranted.

Posted: 2010.11.24

Open & Closed Project

Uniting global knowledge of accessible media

The Open & Closed Project is a public-private-academic partnership pursuing research, standardization, training, and certification in accessible media. Its chief goal is the creation of the first-ever unified set of recommended practices for the four disciplines of accessible media – how-to manuals for captioning, audio description, subtitling, and dubbing. The project will also conduct research, develop needed infrastructure, and train and certify practitioners.

The need

We all use accessible media. At some point in our lives, every viewer of TV, home video, or cinema makes use of accessibility features. Some typical usages are well known:

- A deaf person watches *The Simpsons* with captioning, while, in a living room across town, a blind person enjoys the same show with audio description.
- A pair of young cinephiles watch *Miyazaki's Spirited Away* in its English dubbed version. The next weekend, they scour the foreign-film section of the video store and bring home the DVD of *Run Lola Run*, which they enjoy with English subtitles.

"Accessibility" is generally understood to refer to the needs of people with disabilities, but it can be defined more generally as accommodating characteristics a person cannot change (or cannot change easily). An inability to hear or see is similar to an inability to understand a particular language.

Even viewers without disabilities who do understand the main language used in their country will still use accessibility features from time to time, as in a short foreign-language passage in a movie (where subtitles might be provided) or in a noisy public place (where closed captions might be helpful).

Accessibility, then, is widely used. But there's a problem.

Lack of standards

There are almost no standards for accessible media. *Technical* standards are available: You can look up the exact file format used to add closed captions to a videotape, for example. But the *practice* of accessibility is unstandardized.

A few "guidelines" for captioning and audio description have been published (as in the U.K. and Australia), and one book on subtitling is in print. But there is no single set of trusted reference books that practitioners in the captioning, description, subtitling, and dubbing fields can turn to in order to produce high-quality work.

The result? *Everyone does things differently.* Captions all look different and behave differently depending on who created them. Subtitles vary noticeably. Audio description, the newest form of accessibility, has already taken many divergent forms. And the discrepancies in dubbing are so well-known that they have become a trade dispute (where dubbing tracks from one country are claimed to be substantially different from – and better than – tracks from another country).

- **For the viewer**, the result is confusion. To use one example, watching a single evening of captioned TV can expose a viewer to a half-dozen different captioning styles; even consecutive TV commercials can be captioned differently. In effect, viewers must continuously relearn how to watch TV, film, and video with access features. Programming isn't simply *accessible*; it's accessible in a range of ways that differ for no firm reason.

- **For producers**, the result is reduced value for money. Every practitioner naturally claims that its way is the best. (The more candid among them might admit their work is "good enough.") But producers have no objective way to judge those claims. Producers never know if their investment in accessibility is really paying off.
- **For broadcasters & exhibitors**, the lack of standardization means you can't really be sure you're serving viewers. You may not receive complaints, but that is no proof that viewers are satisfied or that accessibility is of high quality. It can be difficult for a deaf or a blind person, or someone with a language barrier, to file a complaint in the first place. (And by that time, the show is over.) Without standardization, you may be providing accessibility in a way that is inadequate and frustrating to your audience.

Lack of training & certification

Most everyone working in accessibility today is self-trained or was trained by the company they work for. Practitioners can represent themselves as experts with no way to prove it – and no way for anyone else to disprove it.

While a couple of subtitling courses are available in Europe, in broad terms there is no standard, recognized diploma one may seek in any of the fields of accessible media. Nor, for that matter, are access techniques meaningfully taught in film school or in TV and video production courses. With no recognized training, there is no way to certify practitioners as meeting standards.

The solution

The Open & Closed Project intends to solve all these problems through a combination of research and development; standardization; training; and certification.

Recommended practices

Open & Closed will publish *the first-ever unified set of recommended practices* for each of the four accessibility techniques – how-to manuals for captioning, audio description, subtitling, and dubbing.

When we say *single* set of recommended practices, we mean one manual for each discipline (in print, online, and in accessible alternates). Each manual will take into account the needs of different technologies, languages, and locales. For example, U.S. English Line 21 closed captioning is different from Canadian French Line 21 closed captioning, both of which are different once again from open captioning for movies, DVD captioning, captions added to online video, and other forms.

The results will not be generic or vague. In fact, the recommended practices will be precisely detailed and will cover a wide range of real-world scenarios based on decades of experience. There will be no need for practitioners to reinvent the wheel; each manual will attempt to cover every typical issue, question, or technique – and an enormous range of atypical ones.

Collaborative development

Today's practitioners compete with one another. How will Open & Closed arrive at consensus?

The answer: We won't.

Recommending a single set of practices makes it impossible to reach universal agreement; someone is always going to disagree. The difference here is that everyone has a chance to contribute to the process. True to the Internet era, all standardization discussions will be posted for online comment. After sufficient rounds of consultation, the best solution to each problem will become the recommended practice.

The project will limit an emphasis on feeling and habit, encouraging evidence and fact instead. Discussions based on opinion will be discouraged ("I really like that idea" or "That's not how we do things here"), while discussions based on reasons or research will be favoured ("This idea is better *because*" or "We surveyed 50 people on that topic, and here's what we found").

Our approach has a number of advantages:

- **Transparency.** Everyone can follow the discussion and contribute.
- **Popularization.** Practitioners will no longer be the only ones deciding how accessibility is done. Viewers, producers, broadcasters, exhibitors, and everyone else can join in.
- **Reducing territoriality.** Practitioners have tended to guard their own techniques like state secrets even though they're often plainly obvious. The Open & Closed process is truly *open*.

Board of advisors

It's important to understand that the process *is not a vote* and *is not consensus*. Why not?

- **Voting tends to be inconclusive.** Research in the captioning field suggests that, given the option to vote on various techniques based on matters of opinion ("Which option do you prefer?"), captioning viewers rarely give a single option a majority vote.
- **Consensus is impossible.** The reason we need the Open & Closed Project is because a consensus on techniques has not been reached so far.

Instead, the project will use a board of advisors who, along with the project director, attempt to rationally decide on recommended practices. (The composition of the board has not been determined at this early stage, but will likely include practitioners, researchers, viewers or consumers, and others. The board must and will be a fair and balanced cross-section.)

Now, one reason why accessibility techniques have diverged can be traced to the fact that several approaches work almost equally well and are not demonstrably wrong. In those cases, the project will simply decide on one option. In other cases, the right way to do things is not obvious and may require research to arrive at an answer, which the project will endeavour to conduct.

But in every case, the Open & Closed Project will make *single* recommendations. The result will be one set of recommended practices – the first authoritative reference in the four fields of accessible media.

Publication formats

The recommended practices will be published in a range of formats. The reference format will be a combination of printed books and videos. An online presentation, and accessible alternate formats and translations, will be provided.

Training and certification

Once the set of recommended practices is available, what do we do with it? *We train and certify practitioners.* This isn't a hypothetical project; we want the practices put into practice.

The *training* stage will involve partnerships with academic institutions and (especially) film and postproduction schools. Through distance education (in particular, online courseware) and through crucial face-to-face training, we will actually teach the recommended practices.

We'll train trainers so the recommendations can be more widely dispersed and reach more people.

We'll also develop a *certification* program. It will finally be possible to earn a diploma in captioning, description, subtitling, dubbing, or any combination thereof. Several models are available for such a program, including certification based on a combination of portfolio evaluation (examination of previous work), a written test, and a personal interview. At that point, the applicant would be deemed a certified practitioner of the Open & Closed Project's recommended practices. Since the certificate would not be government-issued, it would not constitute a license.

Research

The Open & Closed Project will conduct needed research. Goals include:

- **Resolving disputes.** We can test one approach against another.
- **Identifying future practices.** We'll test and recommend new practices for new technologies, like high-definition TV and digital cinema.
- **Understanding interactions.** We'll explore interactions among accessibility techniques – e.g., dubbed movies with captioning or TV shows with captions *and* descriptions.

Research like this doesn't have to be expensive. Even relatively small subject cohorts can give meaningful data. At present, though, there's almost *no* meaningful data, and what little research that exists tends to be unknown to practitioners or ignored.

Infrastructure development

Audiovisual accessibility urgently requires infrastructure improvements, which Open & Closed will provide.

- **Interchange formats.** It's all but impossible to exchange caption and subtitle files from one system to another. It's not widely known that interchange of description and dubbing tracks is also an issue. Open & Closed will develop XML document-type definitions that will account for file and technology formats (e.g., Line 21 captions converted to DVD subpictures); language, national and content variations (e.g., director's cut, or airplane or TV versions); and other factors. The resulting Accessibility Exchange™ or .xex™ file format will be non-proprietary and available for universal use.
- **Fonts.** When viewers complain about captions and subtitles, often what they're really complaining about is readability. There are no viable onscreen typefaces (*screenfonts*) specifically engineered for captioning and subtitling. Open & Closed will hire seasoned designers to develop a wide range of typographically sound and readable screenfonts.

Global reach

This is a global project based in Canada. As a bilingual country with an enormous range of accessible media – including more captioned TV than anywhere in the world; a large dubbing and subtitling industry; and widespread use of all four accessibility techniques in first-run movie houses – Canada has some advantages in developing accessibility standards.

But when we say *global*, we mean it, and that definitely includes publishing recommendations for U.S. practices, not to mention accessibility as it is engaged in Europe, Australia, India, and other parts of the world.

Supported by research & industry

A December 2003 report on captioning in the U.S. stated: "It is now important to conduct research that assesses the best practices for closed-captioning style and speed.... This might include exploring whether different types of captioning conventions should be used for different program genres." The Open & Closed Project fits the bill nicely. Additionally, the Project has received letters of support from throughout the postproduction and accessibility industries.

Benefits

The Open & Closed Project will benefit a number of groups:

- **Practitioners** finally can prove to the world that they're doing solid, reliable work. They can then compete on their thoroughness and competency in implementing the recommended practices.
- **Producers, broadcasters, & exhibitors** will have a usable baseline: It will be possible to require that all suppliers be Open & Closed–certified.
- **Viewers** can finally be assured that the accessibility techniques they use are carried out on the basis of research, fact, and standards. They can also insist that producers, broadcasters, and exhibitors use only certified practitioners.

Partnerships & next steps

The Open & Closed Project is just getting underway. At press time, we have a verbal cooperation agreement with the University of Toronto. We hope for further agreements with other academic and training institutions.

The project will pursue non-profit incorporation. We expect the *development stage* (for the recommended practices, infrastructure, and early training materials) will take four years. Implementation of the training regimen and a certification process will come later.

Total budget for the development stage may be approximately $5–$7 million (Canadian). We're actively interested in partnerships and contributions, whether financial, in-kind, or otherwise.

Contact

Contact the project director, **Joe Clark**, at *416* 461-6788 or joeclark@joeclark.org.